

204210" 29



FIG. 1

10053662.012402
204210.2995007

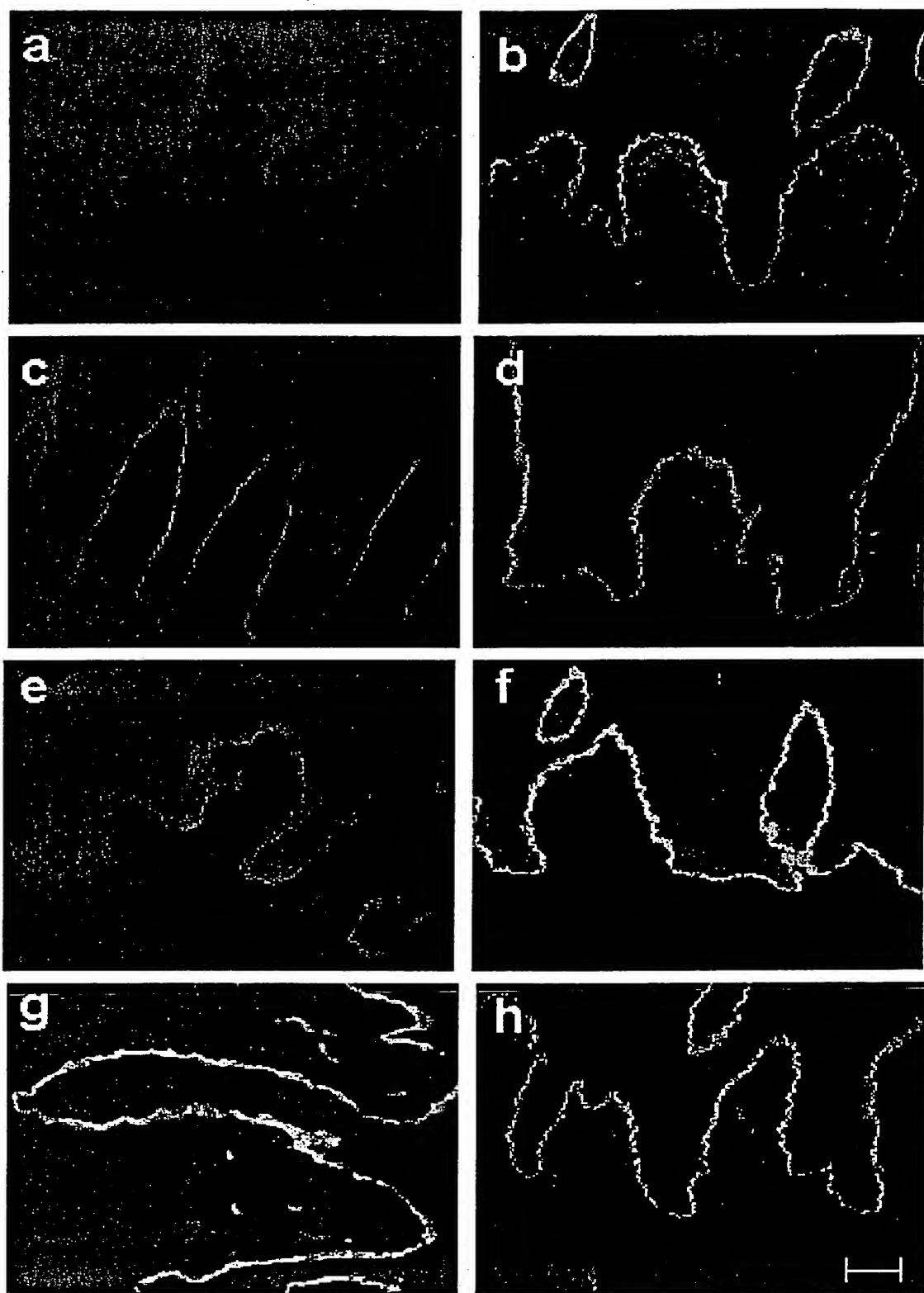


FIG. 2

5'TGGGTCCTCCTTATTACAGG -177

TGAGTCACACCCTGAAACACAGGCTCTCTTCTGTGCTGAGACTGAGTCAGGTAGAAAGAGTCGATAAAACCACCTGATCAAGGAAAAAG -91
 GAAGGCACAGCGGAGCGCAGAGTGAGAACTCCAGCGGCGAGGCGCCGGGCGAGCGACCCCTGCAGCGGCGGACCGCGCGCCGGCCTGGCC -1
 ATGCCTGCGCTCTGGCTGAGCTGCTACCTCTGCTTCTCGCTCCTCTGCCCGCAGCCCGGGCCACCTCCGGGAGGGAAGTCTGTGATTGC 90
 M P A L W L S C Y L C F S L L L P A A ^R A T S G R | E V C D C 30
Dom V
 AACGGGAAGTCCAGGCAATGCATCTTTGACCAGGAAGTTCACAAACAGACAGGAAATGGATTCCGCTGCCTCAACTGCAATGACAACACT 180
 N G K S R Q C I F D Q E L H K Q T G N G F R C L N C N D N T 60
 GATGGCATCCACTGCGAGAGGTGCAAGGCAGGATTTTACCGACAGAGAGAAAGGACCGCTGTTTACCCTGCAATTGTAACCTCTAAAGGT 270
 D G I H C E R C K A G F Y R Q R E R D R C L P C N C N S K G 90
 TCTCTTAGCGCTCGATGTGACAACTCTGGACGGTGCAGCTGTAAGCCAGGTGTGACAGGAGACAGGTGTGACCGATGTCTGCCCCGGCTTC 360
 S L S A R C D N S G R C S C K P G V T G D R C D R C L P G F 120
 CACACACTCACTGATGCTGGGTGCGCCCAAGACAAAGGCTGCTAGACTCCAAGTGTGACTGTGACCCAGCTGGCATCTCAGGGCCCTGT 450
 H T L T D A G C A Q D Q R L L D S K C D C D P A G I S G P C 150
 GACTCAGGCGGCTGTGTCTGCAAGCGGCTGTCACTGGAGAGCGCTGTGATAGGTGTGACCCAGGTACTATCACCTGGATGGGGGAAAC 540
 D S G R C V C K P A V T G E R C D R C R P G Y Y H L D G G N 180
 CCTCAGGGCTGTACCCAGTGTCTTTGCTATGGGCATTCCGCCAGCTGCCACAGCTCTGGGGACTACAGTGTCCATAAAATCATCTCTGCC 630
 P Q G C T Q C F C Y G H S A | S C H S S G D Y S V H K I I S A 210
dom. IV
 TTCCTCAAGATGTGATGGCTGGAAGGCTGTCCAAAGAAACGGGTCTCCTGCAAAGCTCCAGTGGTCACAGCGCCATCGGGATATATTT 720
 F Q D V D G W K A V Q R N G S P A K L Q W S Q R H R D I F 240
 AGCTCAGCACGACGATCAGACCCTGTCTATTTGTAGCTCCTGCCAAATTTCTTGGGAATCAACAGGTGAGCTACGGGCAAAGCCTATCT 810
 S A R R S D P V Y F V A P A K F L G N Q Q V S Y G Q S L S 270
 TTGCACTACCGTGTGGATAGGGGAGGACAGACCCCATCTGCCCATGACGTGATCCTGGAAGGTGCTGGTCTACGGATCACAGCTCCCTTG 900
 F Y R V D R G G R H P S A H D V I L E G A G L R I T A P L 300
 ATGCACCTTAGCAAGACACTGCCTTGTGGGATCACCAAGACTTACACATTAGATTAAATGAACATCCAAGCAGTAATTGGAGCCCCCAG 990
 M L S K T L P C G I T K T Y T F R L N E H P S S N W S P Q 330
 CTAAGTTACTTTGAGTATCGAGGTTACTGCGGAACCTCACAGCCCTGCGGATCCGAGTACCTACGGAGAATACAGTACTGGGTACATT 1080
 L S Y F E Y R R L L R N L T A L R I R A T Y G E Y S T G Y I 360
 GACACGTCGACCTTGATTTTCAGCCCGCCCCGTTTCTGGAGCCCCAGCGCCCTGGGTTGAACAATGTGTATGCCCTGTTGGCTACAAGGGG 1170
 D N V T L I S A R P V S G A P A P W V E Q C V C P V G Y K G 390
Dom. III
 CAGTTCTGCCAGGATTGTGCTTCCGGCTACAAAAGAGATTAGCCAGACTGGGACCTTTTGGCACCTGTATTCCATGTAAGTCCAAGGG 1260
 Q F C Q D C A S G Y K R D S A R L G P F G T C I P C N C Q G 420
 GGAGGGGCTGCGATCCAGACACAGGAGACTGTTACTCAGGGGATGAGAACCCTGACATCCCTGAGTGTGCTGACTGCCCCATTGGTTTC 1350
 G G A C D P D T G D C Y S G D E N P D I P E C A D C P I G F 450
 TACAACGATCCACAAGACCCCGCAGCTGCAAGCCGTGCCCTGTGCAATGGGTTTCAGCTGCTCCGTGATGCCTGAGACAGAGGAGGTG 1440
 Y N D P Q D P R S C K P C P C R N G F S C S V M P E T E E V 480
 GTGTGCAATAACTGCCCCAGGGTGTCACTGGTGCCCGCTGTGAGCTCTGTGCTGATGGCTATTTTGGGGACCCCTTCGGGGAACGTGGC 1530
 V C N N C P Q G V T G A R C E L C A D G Y F G D P F G E R G 510
 CCAGTGAGGCCTTGTGAGCCTGTGAGTGAACAACAACGTGGACCCTAGTGCTCCGGGAACCTGTGACCGCCTGACAGGCAGGTGTCTG 1620
 P V R P C Q P C Q C N N N V D P S A S G N C D R L T G R C L 540
 AAGTGCATCCACAACACAGCTGGGGTCCACTGTGACCAGTGCAAAGCAGGCTACTATGGGGACCCGTTGGCTCCCAATCCAGCAGACAAG 1710
 K C I H N T A G V H C D Q C K A G Y Y G D P L A P N P A D K 570
 TGTCGAGCTTGCAACTGCAACCCAGTGGGCTCGGAGCCTGTGGAGTGTGCAAGTGTGAGTGTGTTTGAAGCCAGGCTTTGGTGGC 1800
 C R A C N C N P V G S E P V E C R S D G S C V C K P G F G G 600

FIG. 3

CTCAGCTGTGAGCATGCGGCACTGACCAGCTGTCCAGCTTGCTATAATCAAGTGAAGGTTTCAGATGGATCAGTTTATGCAGCAGCTCCAG 1890
L S C E H A A L T S C P A C Y N Q V K V Q M D Q F M Q Q L Q 630
└─┬─┘ Dom. I/II

ATCCTGGAGGCCCTGATTTTGAAGGCTCAGGGTGGAGCAGTACCCAACGCAGAGCTGGAAGGCAGGATGCAGCAGGCTGAGCAGGCCCTT 1980
I L E A L I S K A Q G G A V P N A E L E G R M Q Q A E Q A L 660

CGGGACATTCTGAGAGAAGCCAGATTTACAAGATGCTGTTAGATCCTTCAATCTCCGGGTGGCCAAGGCAAGGACTCAAGAGAATAGC 2070
R D I L R E A Q I S Q D A V R S F N L R V A K A R T Q E N S 690

TACCGGGACCGCCTGGATGACCTCAAGATGACTGTGGAAGAGTTCGGGCCCTGGGCAGTCAGTATCAGAACCAAGTTCAGGATACTCGC 2160
Y R D R L D D L K M T V E R V R A L G S Q Y Q N Q V Q D T R 730

AGGCTCATCACTCAGATGCGCCTGAGCCTGGAGGAAAGTGAGGCTTCCTGCAAAACACCAACATTCTCTCCTTCAGAGCACTACGTGGGG 2250
R L I T Q M R L S L E E S E A S L Q N T N I P P S E H Y V G 750

CCAAATGGCTTTAAAAGTCTGGCTCAGGAGGCCACGAGATTGGCAGACAGCCATGTTTCAGTCAGCCAGTAACATGGAGCAACTGGCAAAG 2340
P N G F K S L A Q E A T R L A D S H V Q S A S N M E Q L A K 780

GAAACCCAGGAGTATTCAAAGAGCTGATGTCACTGGTGC GCGAGGCTCTGCAGGAAGGAGGCGGAAGCGGCAGCCTGGACGGAGCCGTG 2430
E T Q E Y S K E L M S L V R E A L Q E G G G S G S L D G A V 810

GTGCAAAGGCTTGTGGGAAAATTGCAAAAACTAAATCTCTGGCCAGGAGTTGTCGAGGGAGGCCACGCAAACCGACATGGAAGCAGAT 2520
V Q R L V G K L Q K T K S L A Q E L S R E A T Q T D M E A D 840

AGGCTTTATCAGCATAGTCTCCACCTTCTCAATTCGCTGTCTCAGATTTCAGGGAGTCAATGATCAGTCCTTGCAGGTAGAAGCGAAGAGG 2610
R S Y Q H S L H L L N S V S Q I Q G V N D Q S L Q V E A K R 870

CTCAGCAAAAAAGCTGATTCTCTCTCAAACCGTGTGACTAAGCATATGGATGAGTTCAAGCACGTGCAAAGCAATCTGGGAAACTGGGAA 2700
L Q K A D S L S N R V T K H M D E F K H V Q S N L G N W E 900

GAAGAAACCCGGCAGCTCTTACAGAAATGGAAGAATGGGAGACAGACATCAGATCAGCTGCTTTCCCGTGCCAACCTTGCTAAAAGCAGA 2790
E T R Q L L Q N G K N G R Q T S D Q L L S R A N L A K S R 930

GCCCAAGAGCACTAAGTATGGGCAATGCCACTTTTTATGAAGTTGAGAACATCTTAAAGAATCTCAGAGAGTTTGACCTGCAGGTTGGA 2880
A Q E A L S M G N A T F Y E V E N I L K N L R E F D L Q V G 960

GATAAAGAGCAGAAGCTGAAGAGGCCATGAAGAGACTCTCTACATCAGCCAGAAGGTTGCAGGTGCCAGTGACAAGACGAAGCAAGCA 2970
D R A E A E E A M K R L S Y I S Q K V A G A S D K T K Q A 990

GAAGCAGCCCTGGGCAGTGTCTGTCGCGACGCCAGAGGGCAAAGAATGCAGCCAGGGAGGCCCTGGAGATCTCTGGCAAGATAGAACAG 3060
E A A L G S A A A D A Q R A K N A A R E A L E I S G K I E Q 1020

GAGATAGGAGGTCTGAACCTTGAAGCCAATGTGACAGCAGATGGAGCCTTGGCCATGGAGAAGGGACTGGCCACTCTGAAAAGTGAGATG 3150
E I G G L N L E A N V T A D G A L A M E K G L A T L K S E M 1050

AGAGAAGTGAAGGAGAGCTGTCAAGGAAGGAGCAGGAGTTTGACATGGATATGGACGCAGTGAGATGGTAATTGCAGAGGCCCAAAGA 3240
R E V E G E L S R K E Q E F D M D M D A V Q M V I A E A Q R 1080

GTGAAAACAGAGCCAAGAATGCTGGAGTTACGATCCAAGACACACTCAACACATTGGATGGCATCCTACACCTAATAGACCAGCCTGGC 3330
V E N R A K N A G V T I Q D T L N T L D G I L H L I D Q P G 1110

AGTGTGGATGAAGAGAGGCTGATCTTACTGGAGCAGAAGCTTTTCCGAGCCAAGACTCAGATCAACAGCCAGCTACGGCCCTTGATGTCA 3420
S V D E E R L I L L E Q K L F R A K T Q I N S Q L R P L M S 1140

GAGCTGGAAGAGAGGGCACATCGGCAGAAGGGCCACCTCCGTTTCTGGAGACTAGCATAGATGGGATTCTGGCTGATGTGAAGAACCTG 3510
E L E E R A H R Q K G H L R F L E T S I D G I L A D V K N L 1170

GAGAACATCAGGGACAACCTGCCCCGGGCTGCTACAATACCCAGGCTCTTGAGCAACAGTgaagctgccttagagattttctcaaccaag 3600
E N I R D N L P P G C Y N T Q A L E Q Q * 1190
gttcttgggattcagacctagctgccttagagattttctcaaccaaggttcttgggattcagacctcagggctcaggagcccgcattgcggg 3690
tggggtgggattgggaattttgaatatgttgaatgcgtgtgctcaggccccagtgaaacctgatcccatccctgagacctcgccagataa 3780
atgtctttattg 3789-3'

FIG. 3 cont'd

204270" 29955001

horse	1	MPALMLSCVLCFSLPAPARATSRREVCDNCKSKQCI	FDQELHKTGNGFRCLNCNDNDGHCBCRCKAGFYR	RRDRCLPCNCKSKGSLSARDNSG
man	1	MPALMLSCVLCFSLPAPARATSRREVCDNCKSKQCI	FDQELHKTGNGFRCLNCNDNDGHCBCRCKAGFYR	RRDRCLPCNCKSKGSLSARDNSG
mouse	1	MPALMLSCVLCFSLPAPARATSRREVCDNCKSKQCI	FDQELHKTGNGFRCLNCNDNDGHCBCRCKAGFYR	RRDRCLPCNCKSKGSLSARDNSG
horse	101	RCCKPGVTGRCDRCLPGFH	LTDAGCAQDORLLDSCDDPAGISGPDGRCVCKPAVT	GERCDRCRPGYVHLDGNGPQGTQCFCYGHSASCHSG
man	101	RCCKPGVTGRCDRCLPGFH	LTDAGCAQDORLLDSCDDPAGISGPDGRCVCKPAVT	GERCDRCRPGYVHLDGNGPQGTQCFCYGHSASCHSG
mouse	101	RCCKPGVTGRCDRCLPGFH	LTDAGCAQDORLLDSCDDPAGISGPDGRCVCKPAVT	GERCDRCRPGYVHLDGNGPQGTQCFCYGHSASCHSG
horse	201	DYSVHKIISAEHQDWDGKAVQNRGSPAKLQWSQRHDI	FSSARRSPVYVAPAKFLNQVSYGOSLSFDYR	VDRGRHPSAHVILEGAGLRITAPL
man	201	DYSVHKIISAEHQDWDGKAVQNRGSPAKLQWSQRHDI	FSSARRSPVYVAPAKFLNQVSYGOSLSFDYR	VDRGRHPSAHVILEGAGLRITAPL
mouse	201	DYSVHKIISAEHQDWDGKAVQNRGSPAKLQWSQRHDI	FSSARRSPVYVAPAKFLNQVSYGOSLSFDYR	VDRGRHPSAHVILEGAGLRITAPL
horse	301	MPLSKTLPCCGTTKTYTFRLNEHPSSNNWSPQ	LSYFEYRRLRLNLTALR	IRATYGEYSTGYIDNVTLISARVPSGAPAPWVEQC
man	301	MPLSKTLPCCGTTKTYTFRLNEHPSSNNWSPQ	LSYFEYRRLRLNLTALR	IRATYGEYSTGYIDNVTLISARVPSGAPAPWVEQC
mouse	301	MPLSKTLPCCGTTKTYTFRLNEHPSSNNWSPQ	LSYFEYRRLRLNLTALR	IRATYGEYSTGYIDNVTLISARVPSGAPAPWVEQC
horse	400	YKRSARLGPFGTCIPCNCGGACDPD	DTGDCYSGDENPDI	ECADCPIGFYNDQDPRCKPCPCNGFSCSVMPETEEV
man	400	YKRSARLGPFGTCIPCNCGGACDPD	DTGDCYSGDENPDI	ECADCPIGFYNDQDPRCKPCPCNGFSCSVMPETEEV
mouse	401	YKRSARLGPFGTCIPCNCGGACDPD	DTGDCYSGDENPDI	ECADCPIGFYNDQDPRCKPCPCNGFSCSVMPETEEV
horse	500	GYFGDPFGERGVRPCQPCQCNVNDP	PSAGNCDRLTGRCLKCIHNTAGV	CDQCKAGYGDPLAPNADKCRACNCPNGSPVECRSDG
man	500	GYFGDPFGERGVRPCQPCQCNVNDP	PSAGNCDRLTGRCLKCIHNTAGV	CDQCKAGYGDPLAPNADKCRACNCPNGSPVECRSDG
mouse	500	GYFGDPFGERGVRPCQPCQCNVNDP	PSAGNCDRLTGRCLKCIHNTAGV	CDQCKAGYGDPLAPNADKCRACNCPNGSPVECRSDG
horse	600	GCSCHAALTSPACYNQVKNQDQF	QWQQLQILEALISKAQGG	AVPNAELGRMOQAEOALDILREAOISQAVRS
man	599	GCSCHAALTSPACYNQVKNQDQF	QWQQLQILEALISKAQGG	AVPNAELGRMOQAEOALDILREAOISQAVRS
mouse	600	GCSCHAALTSPACYNQVKNQDQF	QWQQLQILEALISKAQGG	AVPNAELGRMOQAEOALDILREAOISQAVRS
horse	697	DLKMTVERVPRALGSOYQNVQDTRRLITONRLS	ISEASLQNTNTP	PSHYVGPNGFKSLAQEAATLADSHVQSASNMEO
man	697	DLKMTVERVPRALGSOYQNVQDTRRLITONRLS	ISEASLQNTNTP	PSHYVGPNGFKSLAQEAATLADSHVQSASNMEO
mouse	700	DLKMTVERVPRALGSOYQNVQDTRRLITONRLS	ISEASLQNTNTP	PSHYVGPNGFKSLAQEAATLADSHVQSASNMEO
horse	797	GGGSGSLDCAVVQRLVGLKQTKSLAQELSR	REATQADWEADRSYOHSLHLNSVSOIGVNDQSL	QVEAKP
man	797	GGGSGSLDCAVVQRLVGLKQTKSLAQELSR	REATQADWEADRSYOHSLHLNSVSOIGVNDQSL	QVEAKP
mouse	800	GGGSGSLDCAVVQRLVGLKQTKSLAQELSR	REATQADWEADRSYOHSLHLNSVSOIGVNDQSL	QVEAKP
horse	894	SNLGNWEEETRLQIIONGNROTSDOLLSRANLAK	SRAQEAELSMGNATFYEVENILKNLREFDLO	CDKRAEAEAMKRLSVISQKVA
man	897	SNLGNWEEETRLQIIONGNROTSDOLLSRANLAK	SRAQEAELSMGNATFYEVENILKNLREFDLO	CDKRAEAEAMKRLSVISQKVA
mouse	897	SNLGNWEEETRLQIIONGNROTSDOLLSRANLAK	SRAQEAELSMGNATFYEVENILKNLREFDLO	CDKRAEAEAMKRLSVISQKVA
horse	994	LGSAADAQRAKNAAREALEISGKI	EQEITGCLNEANVTADGALANEKGLATL	KSEMREVEGELSRKEQFDDMDAVQMVIT
man	997	LGSAADAQRAKNAAREALEISGKI	EQEITGCLNEANVTADGALANEKGLATL	KSEMREVEGELSRKEQFDDMDAVQMVIT
mouse	997	LGSAADAQRAKNAAREALEISGKI	EQEITGCLNEANVTADGALANEKGLATL	KSEMREVEGELSRKEQFDDMDAVQMVIT
horse	1094	DTLNTLDGILHLIDQPGSVDBEEL	LILLEQLFRAKTOINSQURPLNSELEERARQ	QGHLETSIDGLADYKNLENIRDNLP
man	1097	DTLNTLDGILHLIDQPGSVDBEEL	LILLEQLFRAKTOINSQURPLNSELEERARQ	QGHLETSIDGLADYKNLENIRDNLP
mouse	1096	DTLNTLDGILHLIDQPGSVDBEEL	LILLEQLFRAKTOINSQURPLNSELEERARQ	QGHLETSIDGLADYKNLENIRDNLP

FIG. 4

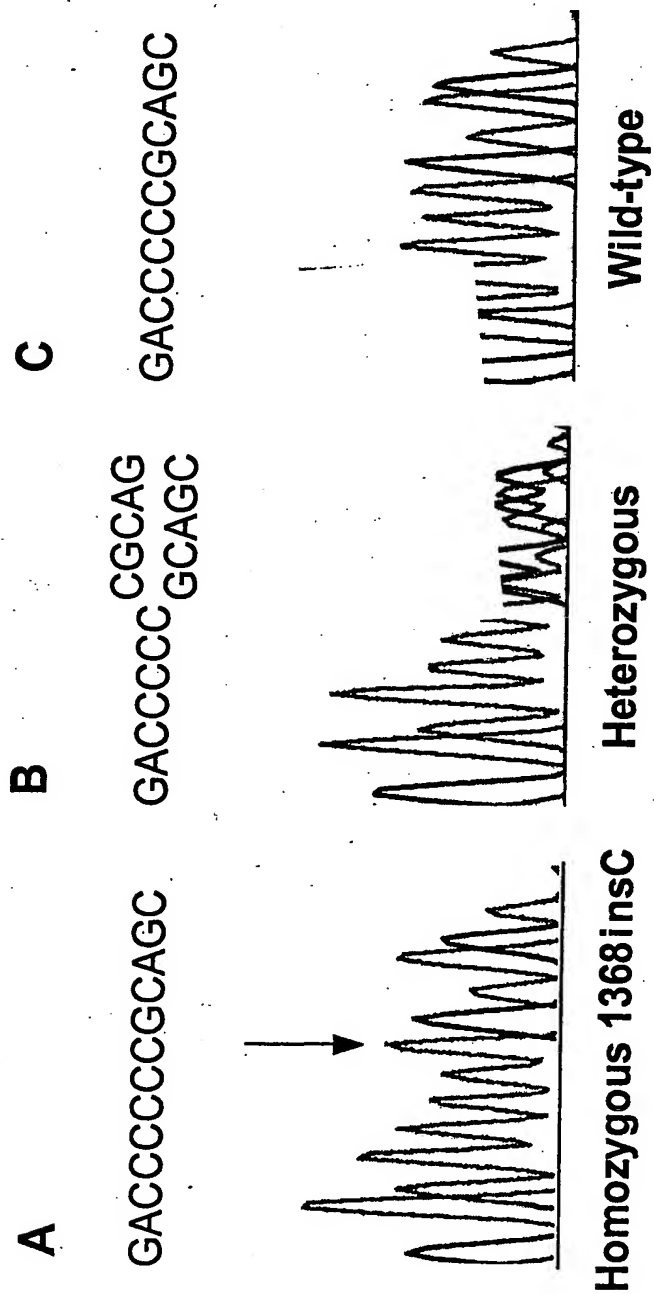


FIG. 5

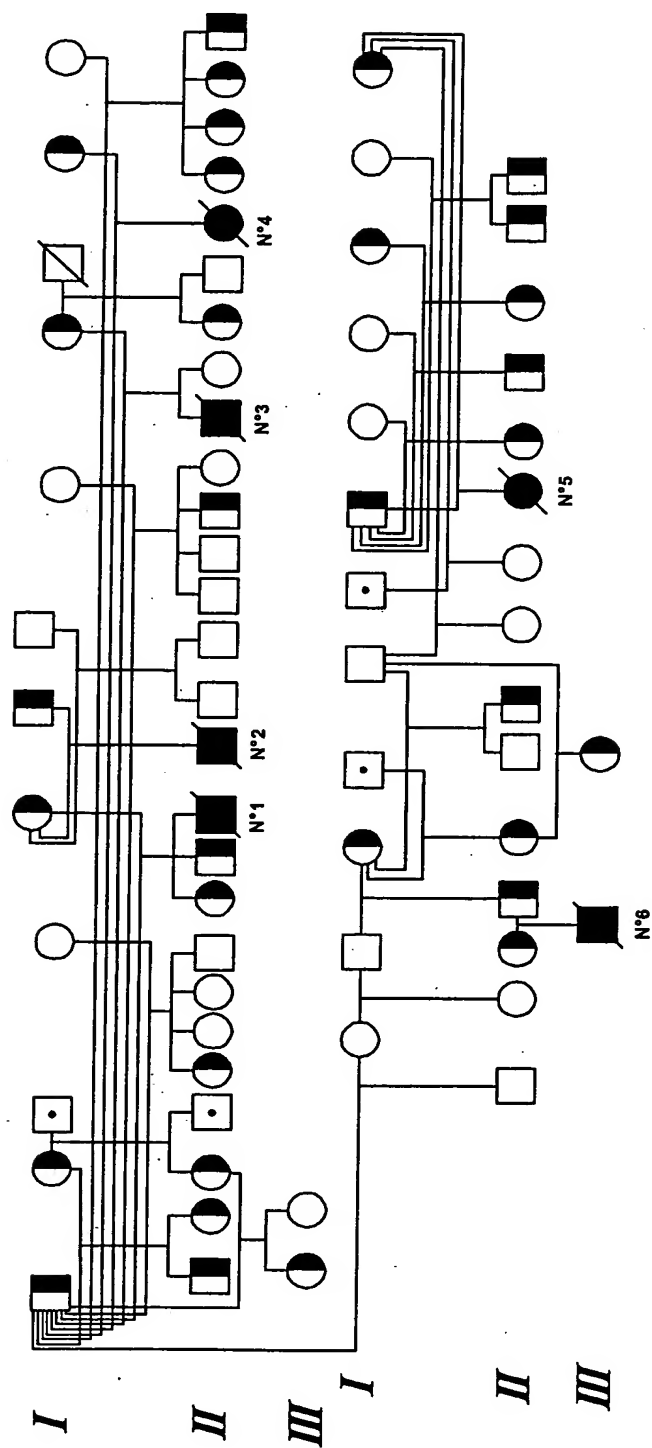


FIG. 6